DOCUMENT RESUME

ED 210 045 JC 800 021

AUTHOR Adamson, Willie D.
TITLE Institutional Planning: A Systems Approach.
PUB DATE 24 Sep 81
NOTE 19p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Educational Administration; *Educational Planning; *Management Information Systems; Organizational Objectives; Postsecondary Education; Systems Analysis; *Systems Approach

ABSTRACT

This four-chapter report explores the possible contributions of a systems approach to institutional planning. After introductory comments, Chapter I reviews the management theory of Henry Fayol, which emphasizes management tasks, such as planning, organizing, commanding, coordinating, and controlling, which are "universal" regardless of the level or kind of organization being considered. The applicability of this theory to education is then assessed. Next, Chapter II defines the systems approach to management as the implementation of a holistic view of an organization, focusing on the interactions and working relationships of its component parts and on the organization's interaction with its environment. This chapter goes on to examine and provide examples of organizational goals (i.e., broad statements of philosophy/purpose) and objectives (i.e., desired accomplishments that can be measured within a given time period) and to consider their use in guiding the systems planning process. Chapter III illustrates the use of a management information system in strategic planning, management control, and operating control. In conclusion, Chapter IV re-emphasizes the applicability of the systems approach to higher education. (KL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED210045

INSTITUTIONAL PLANNING: A SYSTEMS APPROACH

by

Willie D. Adamson

Submitted to ERIC

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

September 24, 1981

JC 800 021

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Willie D. Adamson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
[ ] This document has been reproduced as received from the person or organization originating it.
[X] Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

TABLE OF CONTENTS

Chapter

I. INTRODUCTION 1

II. A SYSTEMS APPROACH TO INSTITUTIONAL PLANNING 4

Assessing the Whole 5
Goals. 7
Objectives 8

III. THE ROLE OF THE MANAGEMENT INFORMATION SYSTEM IN INSTITUTIONAL PLANNING 10

Strategic Planning 10
Management Control 11
Operating Control. 12

IV. CONCLUSIONS. 14

REFERENCES 15

BIBLIOGRAPHY 16

CHAPTER I

INTRODUCTION

As colleges and universities have grown in enrollment and budget and as their functions have become more complex, with respect to both internal and external commitments and responsibilities, institutional planning has become an increasingly difficult task. Because of this growth and functional complexities, administrators must be cognizant of the interrelationships among the component parts of the institution if intelligent planning is to occur. Accordingly, intelligent and effective planning in educational institutions, like industry, requires information from all interior parts and the external environment if plans are to be carried forward in a manner which will balance human, financial, and physical considerations. This paper, then, explores the possible contributions that a systems approach to institutional planning might make to the design of a college or university organization which should lead to better understanding of the management process, interrelationships among component parts, and the external environment.

Industrial and educational organizations differ greatly in their purpose, their objectives, their values, markets and/or constituencies. But all have in common the executive function and the executive task. There may never be a unified theory of administration for these organizations. There certainly is none

today. However, the managerial tasks, the managerial problems and the managerial tools are very much the same across organizational lines. They are fashioned, primarily, by what these organizations have in common.

For the first time in the development of management thought, Henri Fayol provided a broad framework of the general principles of management that explained the nature and commonalities of the process. His observations first appeared in 1916 in French, under the title of Administration Industrielle et Generale. The fact that this book was not widely available in English in the United States until 1949[1] is an indication of the delay in the development of modern management theory.

Fayol maintained that management was "universal" and that all managers, regardless of their level in the organization, or in spite of the kind of organization they were managing, performed essentially the same tasks. These were: (a) planning, (b) organizing, (c) commanding, (d) coordinating, and (e) controlling. He maintained that these principles of management apply not only to business but also to military. He noted that principles of management are flexible, not absolute, and are capable of adaptation to every need.

There are those who would question the applicability of Fayol's general principles of management to educational institutions. Their arguments include: (a) the nature of education eludes measurement, (b) comparisons with profit-seeking organizations are fallacious, and, of course, the list goes on. Notwithstanding their arguments, there is a growing number of others who believe that there is a core

of knowledge applicable to management problems in education as well as in business.

CHAPTER II

A SYSTEMS APPROACH TO INSTITUTIONAL PLANNING

The questions arise: (a) What is the systems approach to management? (b) How can it be used to manage institutional resources? (c) How can it improve the institutional planning process?

Essentially the systems approach to management means viewing the college or university as a whole whose meaning depends on the interaction of all components. The systems' components are trustees, students, faculty, deans, academic department chairmen, staff and/or administrators. If any of the components is missing, if the whole is broken up into its various components, there is no college or university but rather a collection of independent components each functioning for its independent purpose. Thus, a systems approach concentrates upon relationship rather than parts. A fundamental premise of the systems approach is demonstrated conceptually in Exhibit I. The heavy solid line indicates the authority relationships and hierarchical structure of the classical organization. Concern is with the formal authority relationships and the chain of command rather than the interrelationship of the components. The dotted lines of Exhibit I show components joined together in a system by means of information flow and the systems approach to organization, management and planning.[2]

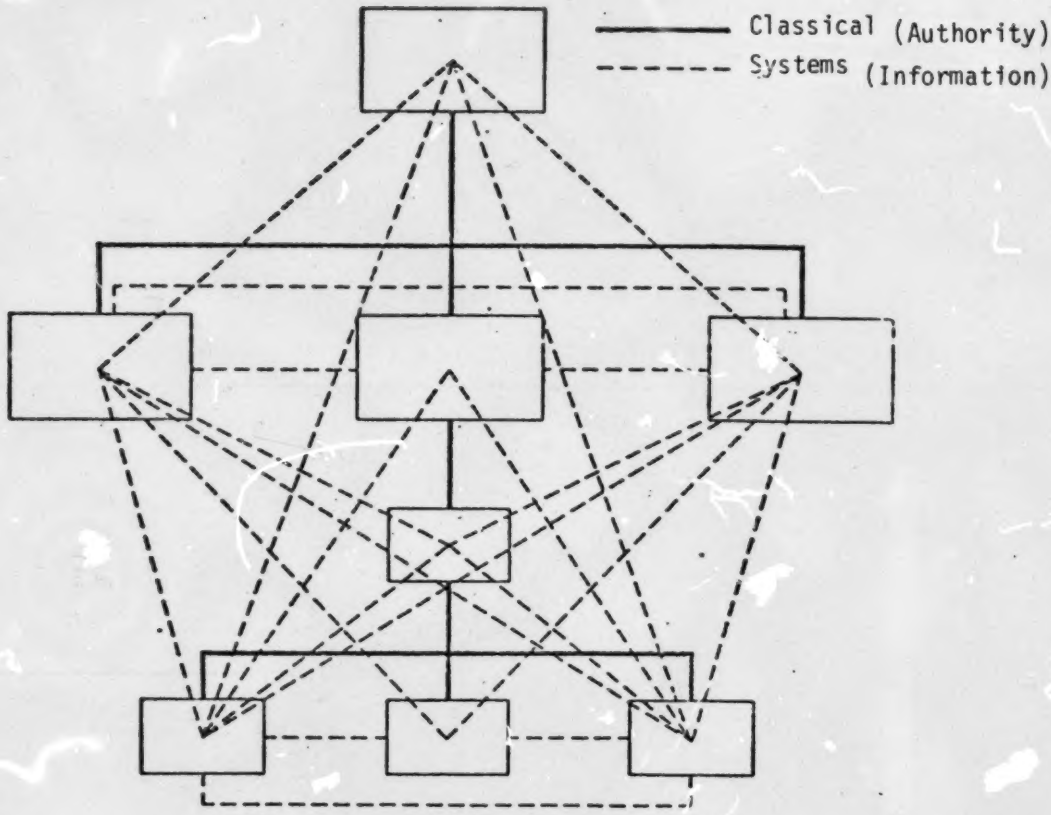

EXHIBIT I
The Classical and Systems Approach to Organization and Information Flow Source: Ross, Management By Information System (1970).

The systems approach, as depicted in Exhibit I, means trying to assess the whole organization rather than identifying one of the components where difficulty may be most apparent. It means looking at interior interactions to understand why the organization is

operating as it is, or to predict its behavior. It means studying the interactions of the system or organization with the sociopolitical, competitive environment within which it is located and inextricably linked.[3]

Assessing the Whole

The style of management in higher education has changed significantly. One major change has been the replacement of the presidential system of leadership with a task-oriented administration. That is, most colleges and universities have developed a form of cabinet management.[4] Their organization charts present the familiar network of President, Vice-President of Academic Affairs, Vice-President of Student Personnel Services, Vice-President or Business Services, a Development Officer, and so on in hierarchical arrangement. The process of centralizaing authority and responsibility in these few administrators runs counter to the order of the day, direct participation of all members of all the constituencies.

A system approach to institutional planning is inconsistent with the common assumption that business services and nonacademic administration can be separated from academic decision making. Many persons believe that administrative affairs, budgeting, or facility planning can be separated from faculty and academic subunits. It is a long way from the truth, for nonacademic problems have a way of cutting across organizational lines and entering the classroom if unchecked. Issues recur regularly which are not entirely financial or entirely academic. To this end, close working relationships between the Vice-President for Business Services and the Academic

Vice-President, as well as faculty and administration must be established and maintained. Consider the following example:

> X College has projected an enrollment of 20,000 students for the academic year 19X9-19X0. For the academic year 19X8-19X9, X College had a teacher/student ratio of 1/30. In early 19X8, X College's School of Business Administration sought and applied for accreditation from the American Assembly of Collegiate Schools of Business. The AACSB informed the Dean of the School of Business Administration that accreditation would be granted in the Fall Quarter of 19X9 if the school would reduce its teacher/student ratio to 1/25. What are the planning implications for academic year 19X9-19X0 for X College?

-- As the teacher/student ratio increases, more teachers and testing supplies are needed.

-- Since more teachers are needed, instructional salaries will increase.

-- If teacher salaries increase, the associated fringe benefits will increase.

-- As instructors increase, classroom utilization will increase.

-- Custodial, maintenance services, and support service salaries will increase.

Although other areas are affected, the example does an excellent job in exemplifying the information flow (budgets, accreditation reports, hiring new faculty and staff, scheduling classes and rooms, controlling class sizes, etc.) emphasized under the systems approach in Exhibit I.

Goals

Goals reflect the need for the college or university to come to terms with the environment in which it operates. Any educational effort,

them, should begin with some explicit identification of a social or individual need to which the institution must address itself. Moreover, a goal is a statement of broad direction, purpose, or intent based on the identified needs of the community and constituencies. The following are some examples of how a goal may be expressed:

-- To provide higher education in an atmosphere of free inquiry and social awareness.

-- To provide quality education that will help every student acquire the habits and attitudes associated with responsible citizenship.

-- To product a better-educated populace.

-- To prepare young adults for gainful employment.

When goals are articulated for a college or university, they are usually all-encompassing statements of philosophy or purpose. However, before goals can be used to guide a system's planning process and activities in a meaningful way, more specific goals must be developed for lower levels of activity within the institution. Naturally, these lower-level goals relate to and support the higher-level goals.

Objectives

While goals provide the basic guidance for all activities in the university or college, they are broadly stated and do not provide the explicitness necessary for planning or measuring results. Therefore, to bring the planning process to a level where decisions can be made, action taken, plans implemented, and results evaluated, objectives must be set. Objectives are desired accomplishments that can be measured within a given time period. Achievement of objectives advance the system toward a corresponding goal. Accordingly, objectives must reflect and support the achievement of the

established goals. The following are some examples of typical objectives:

-- To graduate sixty accountants in 19X9, of whom 95 percent will pass the CPA Examination within one year.

-- To reduce the teacher/student ratio to 1/25 by the opening of the Fall Quarter of 19X9.

These objectives are measurable within a time frame and state as specifically as practical how the degree of achievement will be measured.

CHAPTER III

THE ROLE OF THE MANAGEMENT INFORMATION SYSTEM IN INSTITUTIONAL PLANNING

A management information system is an organized method of providing past, present and projection information relating to internal operations and external intelligence. It supports the planning, control and operational functions of the college or university by furnishing uniform information in the proper time-frame to assist the decision making process.[5] This definition is strongly influenced by the categorizations of the various levels of planning and control identified by Anthony in his authoritative treatise, "Planning and Control Systems, A Framework for Analysis," Harvard University, 1965. He states:

> "Strategic planning is the process of deciding on objectives of an organization, on changes in these objectives, on the resources used to attain these objectives, and on the policies that are to govern the acquisition, use, and disposition of these resources."
>
> "Management control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives."
>
> "Operating control is the process of assuring that specific tasks are carried out effectively and efficiently."

Strategic Planning

Strategic planning is the least formalized of the three catagories. It focuses on external intelligence (the political, economic and social environment in which the college or university operates) and internal data. Specific examples of strategic planning

include:

-- Establishing objectives for the entire college and each academic unit.

-- Determining alternative courses of action for achieving objectives (Proposition 13 is enacted).

-- Population of the community - current level, growth trends, age distribution, and resultant enrollment forecast.

-- Financial (taxpayer resistance) - the tax base has reached the limit the citizenry will accept. Tax base and redevelopment increments.

-- Demographic considerations - sociological changes taking place in the community.

-- Political and governmental considerations and psychoprofiling newly elected or appointed trustees.

-- Acquiring new facilities.

-- Organizational development.

-- Implementing zero-base budgeting or PPB.

-- Projection of state aid, local income, etc.

Management Control

Management control explains the past performance of educational programs and support activities. In performing this task, an administrator compares the program results against the evaluation of criteria established in the planning phase. It also involves the control of various administrative policies and decisions usually relating to the budget. Some examples are:

-- Setting performance criteria

-- Performance auditing

-- Controlling support services levels

-- Formulating and controlling budgets

-- Hiring of new faculty and staff

-- Measuring performance against predetermined criteria

-- Management by exception

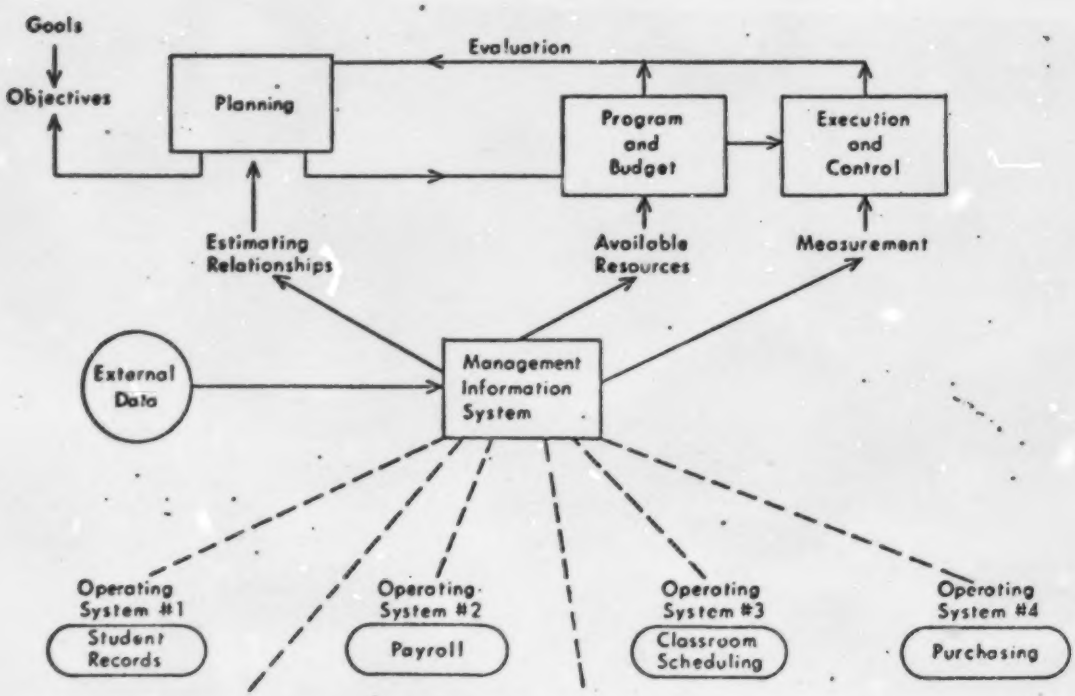

EXHIBIT II

Role of the Management Information System in Planning
Source: Hamelman (1972)

Operating Control

Operating control deals with the execution of specific tasks.

Specific examples include:

-- Scheduling courses and classrooms

-- Assigning faculty to classes

-- Controlling student admission, registration, grades, transcripts, and graduation

-- Personnel management

-- Accounting

-- Career planning and placement

The relationship of the management information system to the operating systems and to the planning process is shown in Exhibit II.

CHAPTER IV

CONCLUSIONS

The traditional management viewpoint was that division of an educational institution into parts was desirable, unambiguous and final. This has been challenged as incompatible with the systems approach. It is considered now that an effective organization structure is determined by the work to be done and the resources available to do it. To this end, an educational institution should be looked on as a total system, emphasizing the interaction of all component parts and its relationship with the supporting environment. This total system concept is a picturesque way of saying that an education institution is a set of interrelated activities that must be coordinated and planned. The institution is certainly not alive, but it has to behave like a living organism. More than anything else, the system must change as the institution changes in response to its environment.

REFERENCES

[1]Henri Fayol, General and Industrial Management, Sir Isaac Pitman & Sons, Ltd., London, 1949.

[2]Joel E. Ross, Management By Information System, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1970, p. 4.

[3]William E. Moran, Managing the University: A Systems Approach, Praeger Publishers (Paul W. Hamelman), New York, New York, 1972, p. 4.

[4]Robert P. Lisensky, "The Management Dilemma: Shared Authority," NACUBO, Vol. 2, No. 3, December 1971, p. 2.

[5]Walter J. Kennevan, "Management Information Systems," Data Management, September 1970, p. 63.

BIBLIOGRAPHY

Fayol, Henri, General and Industrial Management, Sir Isaac Pitman and Sons, Ltd., London, 1949.

Kennevan, Walter J., "Management Information Systems," Data Management, September 1970.

Lisensky, Robert P., "The Management Dilemma: Shared Authority," MACUBO, Vol. 2, No. 3, December 1971.

Moran, William E., "Managing the University: A Systems Approach," edited by Paul W. Hamelman, New York, New York, 1972.

Ross, Joel E., Management By Information System, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1970.

DEC 23 1981

ERIC Clearinghouse for Junior Colleges
96 Powell Library Building
University of California
Los Angeles, California 90024